

Amendments to the Specification:

On page 1, following the title, please add the following heading and paragraph:

-- **CROSS-REFERENCE TO RELATED APPLICATIONS**

This is a divisional of U.S. Patent Application Serial Number 09/790,849, filed February 22, 2001, now pending, which claims benefit of U.S. Provisional Application Serial No. 60/208,260, filed May 31, 2000, now expired, the contents of both applications being incorporated in their entireties herein by reference.--

Please amend the paragraphs on page 3, lines 4-18, as follows:

-- Figure 1 —~~The~~ shows the complete nucleotide coding sequence of human histamine H4 receptor including untranslated regions ~~is shown~~.

Figure 2 —~~The~~ illustrates the amino acid sequence of human histamine H4 receptor ~~is shown~~.

Figure 3 —~~The~~ demonstrates the tissue distribution of the human histamine H4 receptor ~~is shown~~.

Figure 4 —~~Binding~~ shows binding of [³H]-histamine to the human H4 receptor ~~is shown~~.

Figure ~~Figures~~ 5A-C Panels A, B and C —~~The~~ illustrate the complete nucleotide coding sequence of mouse (A), guinea pig (B), and rat (C) histamine H4 receptors ~~is shown~~.

Figure ~~Figures~~ 6A-C Panels A, B and C —~~The~~ illustrate the amino acid sequence of mouse (A), guinea pig (B), and rat (C) histamine H4 receptors ~~is shown~~.

Figure ~~Figures~~ 7 A-B —~~The~~ show the alignment of the polynucleotide sequences of the human, guinea pig, mouse and rat histamine H4 receptor ~~is shown~~.

Figure 8 —~~The shows the~~ alignment of the polypeptide sequences of the human, guinea pig, mouse and rat histamine H4 receptor ~~is shown~~.--

Please amend the paragraph at page 39, lines 7-16, as follows:

--A histamine H4 receptor probe was generated by polymerase chain reaction using the following primer pair. 5' oligo: 5' ACTAGAATTCACCGTGATGCCAGATACTAATAGCACA 3' [~~SEQ-ID-NO.:1~~] (SEQ ID NO:26) and 3' oligo: 5' ATGCAGGATCCAGCATTTGAGACTGACAGGTAT 3' [~~SEQ-ID-NO.:2~~] (SEQ ID NO:27). The final probe sequence is shown in Figure 6. Amplification was cycled 35 times with a 50-60°C annealing temperature and human thalamus cDNA as template. The PCR fragment that was generated (400-500 bp) was ~~32P-labelled~~ ³²P-labelled using the ~~klenow~~ Klenow fragment of DNA polymerase I and an oligo-labeling kit (Pharmacia). The fragment was then cleaned by one passage through a S-200 column (Pharmacia).--